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## Carbon Capture and Storage Regulatory Test Toolkit - Summary Brochure

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# Carbon Capture and Storage Regulatory Test Toolkit

Are you ready for your first Carbon Capture and Storage project application?

Scottish Carbon Capture and Storage (SCCS)  
© The University of Edinburgh 2011



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# Be ready for your Carbon Capture and Storage project application.

## Be ready. Reduce risks to your organisation and to emerging CCS projects.

Implementing this toolkit will assist you – government, regulators, and industry – to work quickly together to map, test and understand your national regulatory process for carbon capture and storage projects – including:

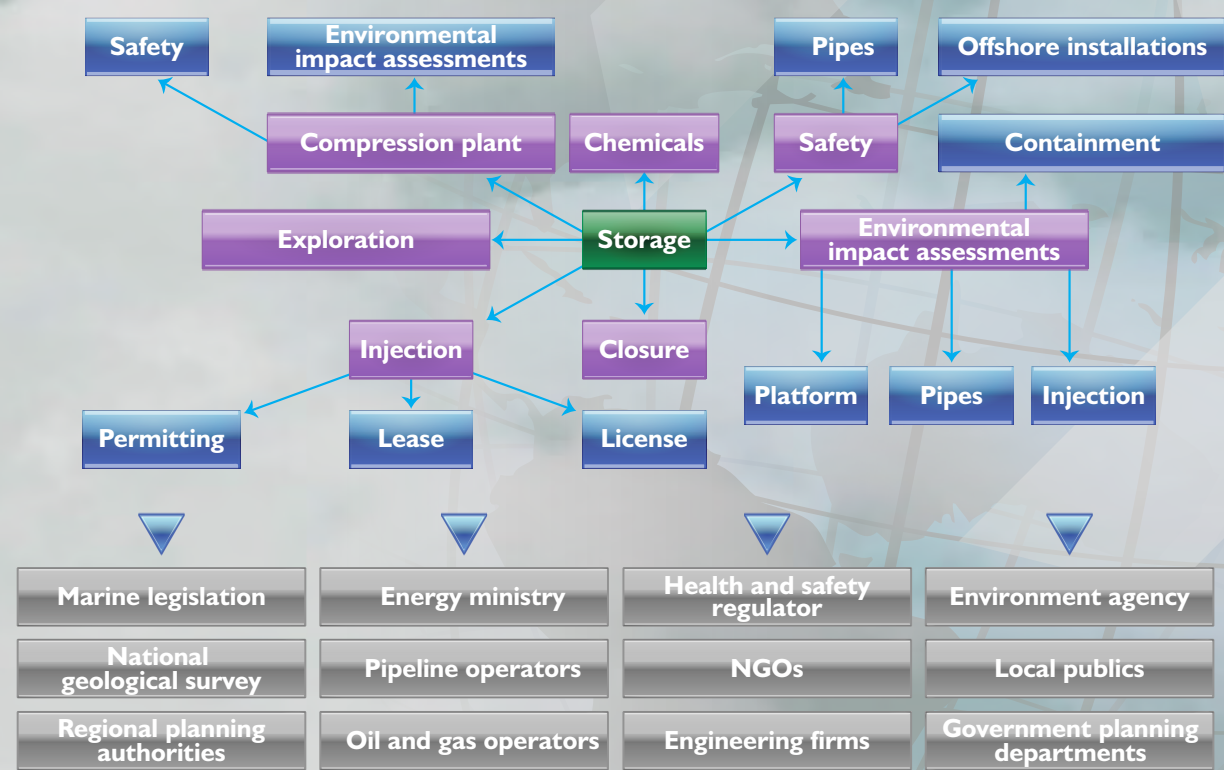
- who needs to be involved;
- what resources are required;
- what permits are required;
- what information and analysis is required;
- what the consents timelines are likely to be; and
- how to follow-up on lessons learned.

The toolkit guides you through a regulatory test exercise using a real or simulated CCS project. The selected project is put through the full regulatory procedure, from inception to decommissioning, working with the actual organisations that would need to be involved in considering a CCS project. This will identify opportunities for process improvement as well as any gaps in knowledge, legislation or procedures.

This toolkit will help you gain the full benefits of this exercise, helping you and other stakeholders turn recommendations into reality.

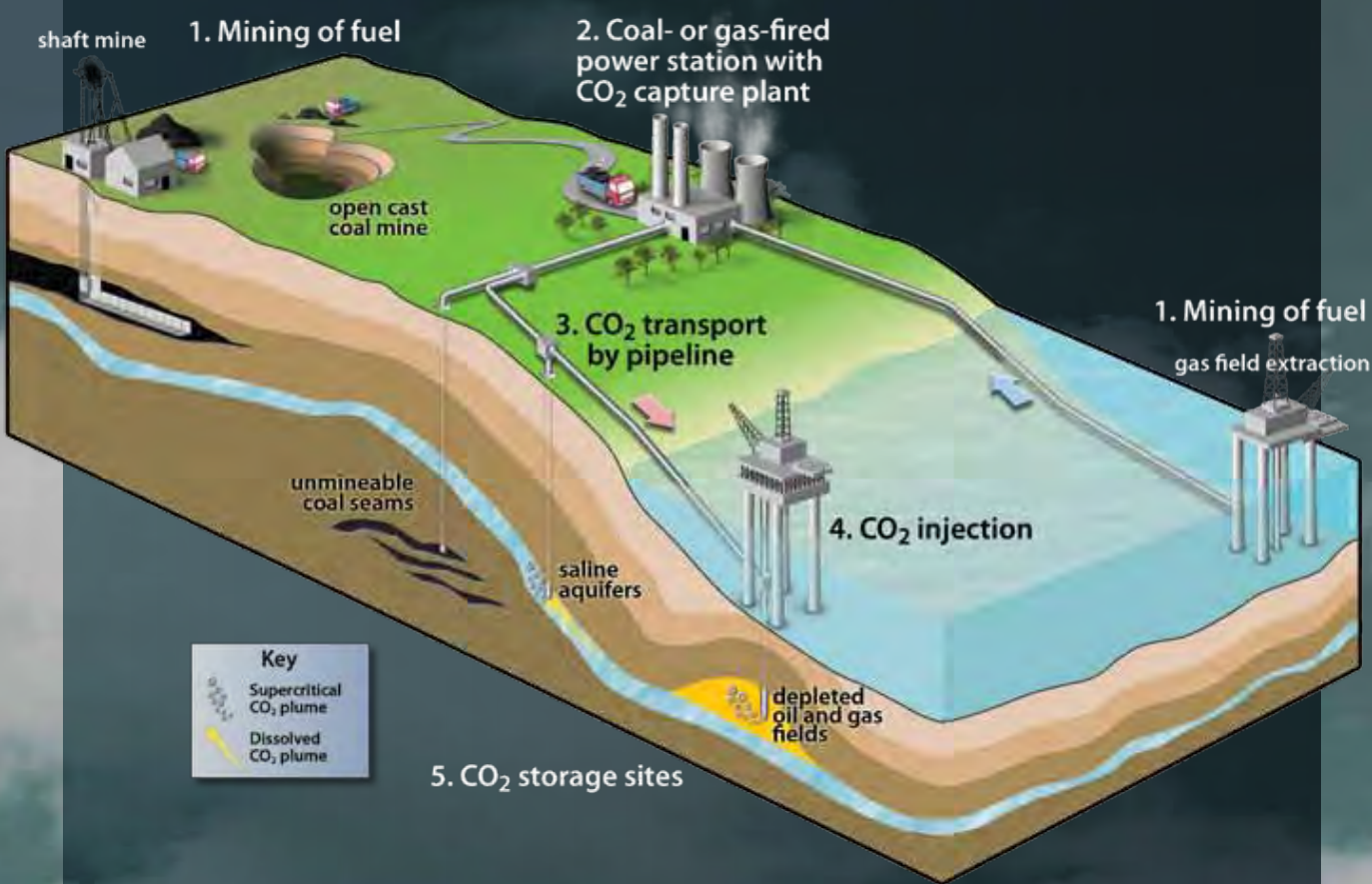
The full toolkit can be found at [www.globalccsinstitute.com/CCSRegToolkit](http://www.globalccsinstitute.com/CCSRegToolkit).

## Generic stakeholder map for CO<sub>2</sub> storage



# CCS Regulatory Test Toolkit

Large point sources of carbon dioxide are responsible for a significant proportion of the world's greenhouse gas emissions, with fossil fuel power stations responsible for around 25 per cent of the total. CCS is expected to make a major contribution to reducing these emissions.



Few commercial-scale CCS projects currently exist in the world and a lack of experience in regulatory agencies and commercial entities of how regulatory systems would apply to CCS projects increases risk, potentially leading to delays and increased costs for emerging projects.

This toolkit has been produced by the Scottish Carbon Capture and Storage research centre on behalf of the Scottish Government and sponsored by the Global CCS Institute. It guides users through a test regulatory exercise that provides a quick, low-cost, low-risk approach to testing regional and national legislation and regulatory systems for CCS projects, and turning recommendations into reality.

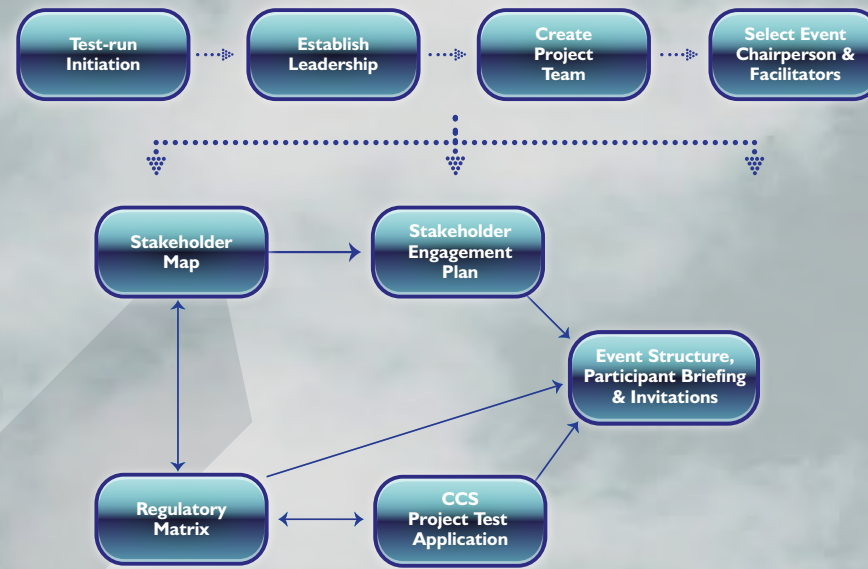
Implementing this toolkit will assist you to:

- improve understanding of your national regulatory process;
- the permits and consents necessary for a CCS project;
- the information and corrective action required;
- the likely timescales for planning and decisions;
- the organisations that need to be involved;
- identify gaps, contradictions, and potential revisions to regulatory systems;
- identify gaps in the legislation, knowledge and resources;
- ensure a viable regulatory process is in place for potential CCS projects;
- help to speed up the management of projects to meet demanding timescales; and
- raise awareness amongst organisations of their role in the regulatory process.



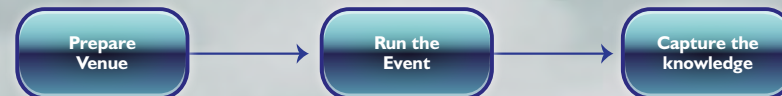
## Stage 1: Exercise Preparation

Ensure that the existing regulatory process is understood; that government, regulators, and industry are committed; and that a suitable CCS project is selected or created as a test case.



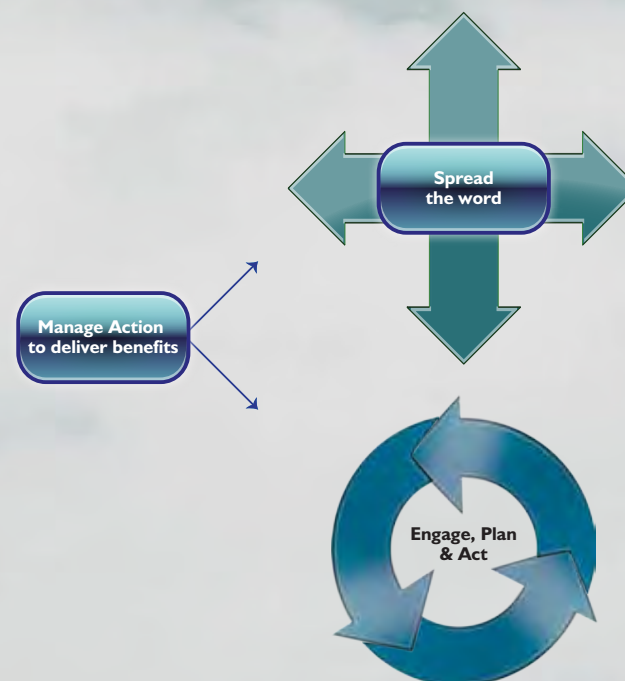
## Stage 2: Workshop Delivery

Test the regulatory system using the selected CCS project; identify scope for improvement in the existing process – including gaps in legislation and knowledge. Capture recommendations for action.



## Stage 3: Exercise Findings and Benefits

Deliver exercise aims, outputs and benefits. Agree appropriate actions and plans. Engage with the organisations necessary to make recommendations reality and report the key findings to a broader audience.



## Stage 1

**Resources and governance** – Establish the case to gain support within your organisation, establish leadership to drive the exercise forward and allocate skilled staff for a project team.

**Stakeholder engagement** – Support from key organisations including government, regulation and business is critical. Develop a stakeholder map identifying core interests and activities in CCS regulation. Consider involving key organisations in running the regulatory test exercise. Agree a shared vision for the test run exercise and its objectives.

**Regulatory Analysis** – Ensure you and other stakeholders understand the existing regulatory process. Create a summary table that documents the current regulatory process for CCS projects and consult widely to improve accuracy. Identify and document an appropriate CCS project to use as a test case throughout the exercise.

**Preparation for the event** – Determine structure, duration and objectives for a workshop event. Select the event chairperson and facilitators and invite key stakeholders. Choose a date and location for the workshop that will encourage strong participation.

## Stage 2

The interactive workshop will enable you to review and refine your collated list of relevant CCS regulations and test their effectiveness by using a simulated or real CCS project of your choice. The workshop event can be designed to be undertaken over a single day, but this format can be extended to meet your own regulatory objectives.

The workshop will:

- capture knowledge from CCS stakeholders;
- identify issues and opportunities for process improvement, including any gaps in legislation;
- conduct risk analysis; and
- identify any gaps in the knowledge and resources of key organisations.

Workshop participants should be drawn from several sectors including government departments, planners, environmentalists, regulators, the oil and gas industry, the electricity generation sector, NGOs, and academics in relevant fields.

By working together participants should gain new knowledge and understanding of the CCS activity chain and associated regulations. The exercise will also raise awareness amongst key stakeholders, and develop the relationships between organisations, necessary to facilitate a streamlined and effective regulatory process.

## Stage 3

Following up on lessons learned from planning, preparation and the workshop event is vital for the regulatory test exercise to deliver maximum benefit to participants and meet its intended objectives.

Spread the word immediately to the wider community of stakeholders using press releases and targeted briefings. A summary report of lessons learned should be circulated to all event participants and used to engage with political decision makers.

The exercise will identify and agree actions that should be taken forward to ensure the efficient processing of applications for CCS projects:

- improvements in regulatory framework design and implementation; and
- specific actions to assist projects that are already making planning applications.

Some recommendations will take longer than others to deliver in practice. Retain leadership to drive agreed changes forward and use the influence of stakeholders to assist engagement with key decision makers and turn recommendations into reality.